

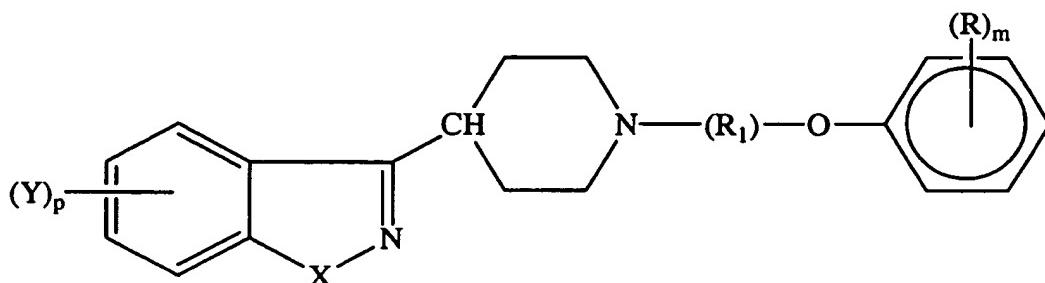
SYNNESTVEDT & LECHNER LLP
 Group Art Unit 1624
 Reissue Application No. 09/712,129

September 13, 2004
 Attorney Docket No. P25,984 REI

In the Claims

Please amend Claim 80 as follows.

80. (Amended five times) A compound as claimed in claim 1 [of the formula:



wherein

X is -O- or -S-;

p is 1 or 2;

Y is hydrogen, lower alkyl, hydroxy, chlorine, fluorine, bromine, iodine, lower alkoxy, trifluoromethyl, nitro, or amino, when p is 1;

Y is lower alkoxy, hydroxy and halogen when p is 2 and X is -O-;

(R₁) is R₂₀, R₂₁, or R₂₂, wherein:

R₂₀ is -(CH₂)_n- where n is 2, 3, 4 or 5;

R₂₁ is

-CH₂-CH=CH-CH₂-,

-CH₂-C≡C-CH₂-,

-CH₂-CH=CH-CH₂-CH₂-,

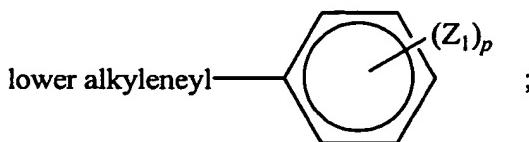
-CH₂-CH₂-CH=CH-CH₂-,

-CH₂-C≡C-CH₂-CH₂-, or

-CH₂-CH₂-C≡C-CH₂-,

the -CH=CH- bond being cis or trans;

R₂₂ is R₂₀ or R₂₁ in which one or more carbon atoms of R₂₀ or R₂₁ are substituted by at least one C₁-C₆ linear alkyl group, phenyl group or



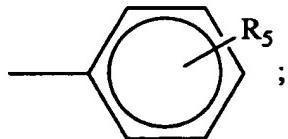
where Z₁ is lower alkyl, -OH, lower alkoxy, -CF₃, -NO₂, -NH₂ or halogen; and R and m are as defined hereinafter;

m is 1, 2, or 3; and

when m is 1, 2, or 3, R is hydrogen, lower alkyl, lower alkoxy, hydroxyl, carboxyl, chlorine, fluorine, bromine, iodine, amino, lower mono or dialkylamino, nitro, lower alkyl thio, trifluoromethoxy, cyano, acylamino, trifluoromethyl, trifluoroacetyl, aminocarbonyl, monoalkylaminocarbonyl, dialkylaminocarbonyl, formyl, -C(=O)-alkyl, -C(=O)-O-alkyl, -C(=O)-aryl, -C(=O)-heteroaryl, -CH(OR⁷)-alkyl, -C(=W)-alkyl, -C(=W)-aryl, and -C(=W)-heteroaryl;

alkyl is lower alkyl;

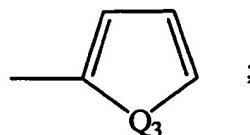
aryl is phenyl or



where R₅ is hydrogen, lower alkyl, lower alkoxy, hydroxy,

chlorine, fluorine, bromine, iodine, lower
monoalkylamino, lower dialkylamino, nitro, cyano,
trifluoromethyl, trifluoromethoxy;

heteroaryl is



Q₃ is -O-, -S-, -NH-, -CH=N-;
W is CH₂ or CHR₈ or N-R₉;
R₇ is hydrogen, lower alkyl, or acyl;
R₈ is lower alkyl;
R₉ is hydroxy, lower alkoxy, or -NHR₁₀; and
R₁₀ is hydrogen, lower alkyl, C₁-C₃ acyl, aryl,
-C(=O)-aryl or -C(=O)-heteroaryl,
where aryl and heteroaryl are as defined above;
and]

with the proviso that when m is 3, R is not -C(=O)-heteroaryl or
-C(=W)-heteroaryl;
[all geometric, optical and stereoisomers thereof,] or a pharmaceutically acceptable
acid addition salt thereof.

Amendment

February 12, 2004

SYNNESTVEDT & LECHNER LLP

Group Art Unit 1624

Reissue Application No. 09/712,129

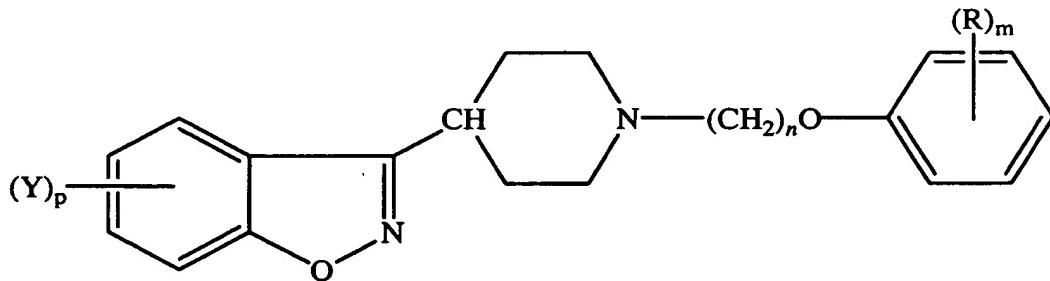
February 10, 2004

Attorney Docket No. P25,984 REI

In the Claims

Please amend Claims 78 and 80 as follows.

78. (Amended three times) A compound of the formula:



wherein p is 1 or 2;

Y is hydrogen, Cl, Br, or F, when p is 1;

Y is lower alkoxy[, hydroxy, or halogen] when p is 2;

n is 2, 3, or 4;

R is hydrogen, C₁-C₃ alkyl, C₁-C₃ alkoxy, hydroxyl, [alkanoyl] Cl, F, Br, I, amino, C₁-C₃ mono or dialkyl amino, acylamino, -NO₂, -OCF₃, -CF₃, alkyl-C(=O)-, CF₃-C(=O)-, or -CH(OR₇)-alkyl;

alkyl is lower alkyl;

R₇ is hydrogen, lower alkyl, lower alkyl-C(=O)-, or CF₃-C(=O)-;

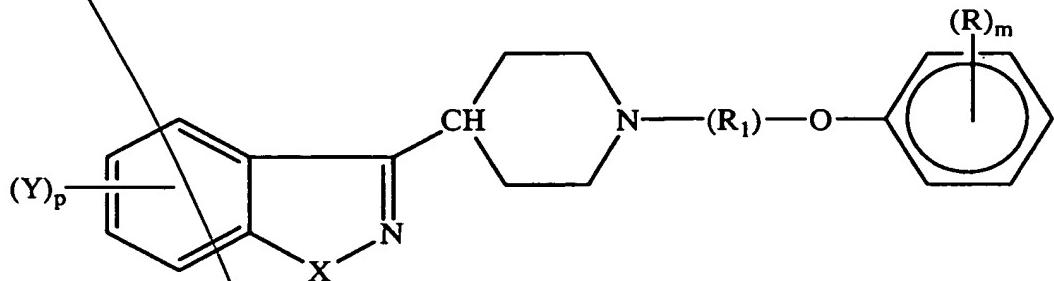
and m is 1, 2, or 3;

all geometric, optical and stereoisomers thereof or a pharmaceutically acceptable acid addition salt thereof.

80. (Amended five times) A compound as claimed in claim 1 [of the formula:

wherein

X is -O- or -S-;



p is 1 or 2;

Y is hydrogen, lower alkyl, hydroxy, chlorine, fluorine, bromine, iodine, lower alkoxy, trifluoromethyl, nitro, or amino, when p is 1;

Y is lower alkoxy, hydroxy and halogen when p is 2 and X is -O-;

see 15 (R1) is R₂₀, R₂₁, or R₂₂, wherein:

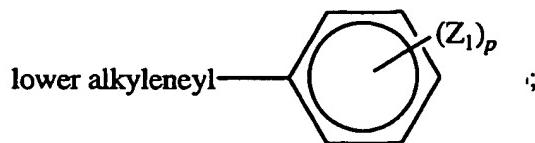
*Sept. 2004
and* R₂₀ is -(CH₂)_n- where n is 2, 3, 4 or 5;

R₂₁ is

- CH₂-CH=CH-CH₂-,
- CH₂-C≡C-CH₂-,
- CH₂-CH=CH-CH₂-CH₂-,
- CH₂-CH₂-CH=CH-CH₂-,
- CH₂-C≡C-CH₂-CH₂- or
- CH₂-CH₂-C≡C-CH₂-,

the -CH=CH- bond being cis or trans;

R₂₂ is R₂₀ or R₂₁ in which one or more carbon atoms of R₂₀ or R₂₁ are substituted by at least one C₁-C₆ linear alkyl group, phenyl group or



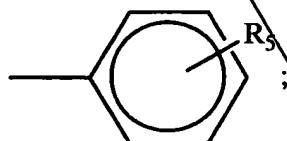
where Z_1 is lower alkyl, -OH, lower alkoxy, -CF₃, -NO₂, -NH₂ or halogen; and R and m are as defined hereinafter;

m is 1, 2, or 3; and

when m is 1, 2, or 3, R is hydrogen, lower alkyl, lower alkoxy, hydroxyl, carboxyl, chlorine, fluorine, bromine, iodine, amino, lower mono or dialkylamino, nitro, lower alkyl thio, trifluoromethoxy, cyano, acylamino, trifluoromethyl, trifluoroacetyl, aminocarbonyl, monoalkylaminocarbonyl, dialkylaminocarbonyl, formyl, -C(=O)-alkyl, -C(=O)-O-alkyl, -C(=O)-aryl, -C(=O)-heteroaryl, -CH(OR)⁷-alkyl, -C(=W)-alkyl, -C(=W)-aryl, and -C(=W)-heteroaryl;

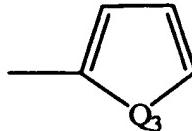
alkyl is lower alkyl;

aryl is phenyl or



where R_5 is hydrogen, lower alkyl, lower alkoxy, hydroxy, chlorine, fluorine, bromine, iodine, lower monoalkylamino, lower dialkylamino, nitro, cyano, trifluoromethyl, trifluoromethoxy;

heteroaryl is

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Q_3 is -O-, -S-, -NH-, -CH=N-;
W is CH₂ or CHR₈ or N-R₉;
R₇ is hydrogen, lower alkyl, or acyl;
R₈ is lower alkyl;
R₉ is hydroxy, lower alkoxy, or -NHR₁₀; and
R₁₀ is hydrogen, lower alkyl, C₁-C₃ acyl, aryl,
-C(=O)-aryl or -C(=O)-heteroaryl,
where aryl and heteroaryl are as defined above;
and]
with the proviso that when m is 3, R is not -C(=O)-heteroaryl [or
-C(W)-heteroaryl];
[all geometric, optical and stereoisomers thereof,] or a pharmaceutically acceptable
acid addition salt thereof.

Amendment

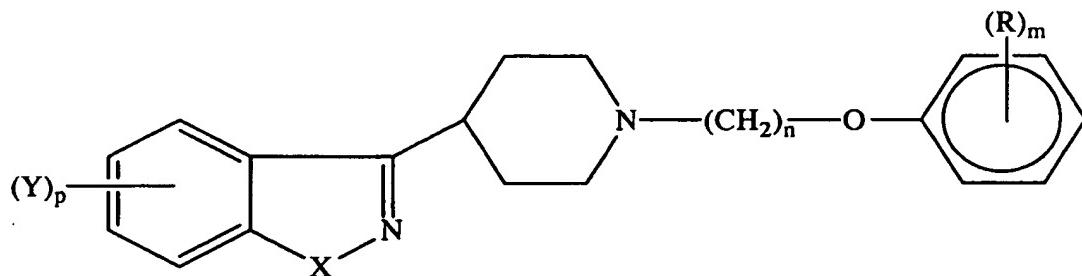
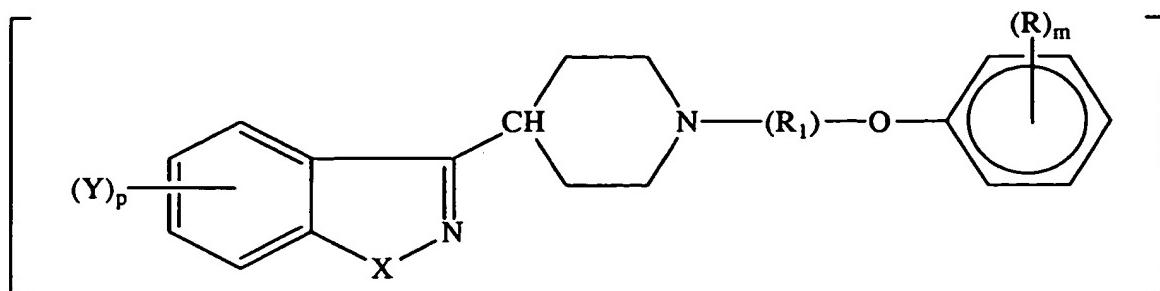
August 29, 2003

SYNNESTVEDT & LECHNER LLP

Application No. 09/712,129
Art Unit 1624

August 27, 2003

1. (Amended four times) A compound of the formula:



wherein

X is $-\text{O}-$ or $-\text{S}-$;

p is 1 or 2;

Y is hydrogen, lower alkyl, hydroxy, chlorine, fluorine, bromine, iodine, lower alkoxy, trifluoromethyl, nitro, or amino, when p is 1;

Y is lower alkoxy[, hydroxy and halogen] when p is 2 and X is $-\text{O}-$;

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[(R₁) is R₂₀, R₂₁, or R₂₂, wherein:

R₂₀ is -(CH₂)_n- where] n is 2, 3, 4 or 5;

[R₂₁ is

-CH₂-CH=CH-CH₂-,

-CH₂-C≡C-CH₂-,

-CH₂-CH=CH-CH₂-CH₂,

-CH₂-CH₂-CH=CH-CH₂-,

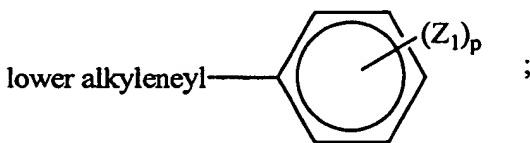
-CH₂C≡C-CH₂-CH₂-, or

-CH₂-CH₂-C≡C-CH₂-,

the -CH=CH- bond being cis or trans;

R₂₂ is R₂₀ or R₂₁ in which one or more carbon atoms of R₂₀ or R₂₁ are

substituted by at least one C₁-C₆ linear alkyl group, phenyl group or



where Z₁ is lower alkyl, -OH, lower alkoxy, -CF₃, -NO₂,

-NH₂ or halogen;]

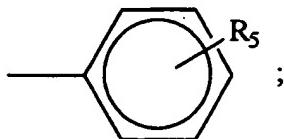
R is hydrogen, lower alkyl, lower alkoxy, hydroxyl, carboxyl, chlorine, fluorine, bromine, iodine, amino, lower mono or dialkylamino, nitro, lower alkyl thio,

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trifluoromethoxy, cyano, acylamino, trifluoromethyl, trifluoroacetyl,
 aminocarbonyl, [monoalkylaminocarbonyl, dialkylaminocarbonyl, formyl,]
 $-C(=O)$ -alkyl, $-C(=O)-O$ -alkyl, $-C(=O)$ -aryl, $-C(=O)$ -heteroaryl, or
 $\underline{-CH(OR)}$ -alkyl; $[-CH(OR^7)]$ -alkyl, $-C(=W)$ -alkyl, $-C(=W)$ -aryl, and
 $-C(=W)$ -heteroaryl;]

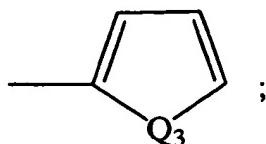
wherein alkyl is lower alkyl;

aryl is phenyl or



wherein R₅ is hydrogen, lower alkyl, lower alkoxy, hydroxy,
 chlorine, fluorine, bromine, iodine, lower
 monoalkylamino, [lower dialkylamino,] nitro, cyano,
 trifluoromethyl, or trifluoromethoxy;

heteroaryl is



wherein Q₃ is $-O-$, $-S-$, $-NH-$, or $-CH=N-$;

[W is CH₂ or CHR₉ or N-R₉;]

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R₇ is hydrogen, lower alkyl, or acyl;

[R₈ is lower alkyl;

R₉ is hydroxy, lower alkoxy, or -NHR₁₀; and

R₁₀ is hydrogen, lower alkyl, C₁-C₃ acyl, aryl,

-C(=O)-aryl or -C(=O)-heteroaryl,

where aryl and heteroaryl are as defined above;]

and

m is 1, 2, or 3;

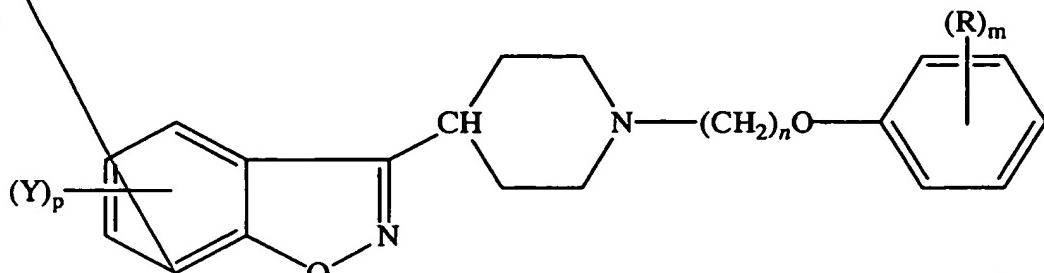
[all geometric, optical and stereoisomers thereof,] or a pharmaceutically acceptable

acid addition salt thereof.

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78. (Amended twice)

A compound of the formula:



(12) wherein p is 1 or 2;

Y is hydrogen, Cl, Br, F, when p is 1;

Y is lower alkoxy[, hydroxy, or halogen] when p is 2;

n is 2, 3, or 4;

R is hydrogen, C₁-C₃ alkyl, C₁-C₃ alkoxy, hydroxyl, [alkanoyl,] Cl, F, Br, I, amino,C₁-C₃ mono or dialkyl amino, acylamino, -NO₂, -OCF₃, -CF₃,alkyl-C(=O)-, CF₃-C(=O)-, or -CH(OR₇)-alkyl;

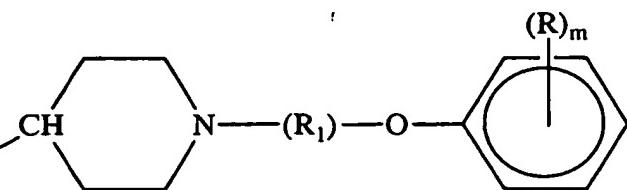
alkyl is lower alkyl;

R, is hydrogen, lower alkyl, lower alkyl-C(=O)-, or CF₃-C(=O)-;

and m is 1, 2, or 3;

all geometric, optical and stereoisomers thereof or a pharmaceutically acceptable acid addition salt thereof.

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80. (Amended four times) A compound as claimed in claim 1 [of the formula:

*see 15, Sept 2004
and*

wherein

D3

X is -O- or -S-;

p is 1 or 2;

Y is hydrogen, lower alkyl, hydroxy, chlorine, fluorine, bromine, iodine, lower alkoxy, trifluoromethyl, nitro, or amino, when p is 1;

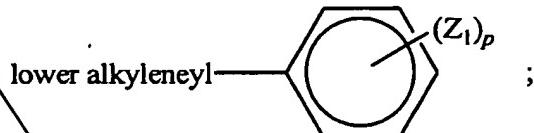
Y is lower alkoxy, hydroxy and halogen when p is 2 and X is -O-;

(R₁) is R₂₀, R₂₁, or R₂₂, wherein:R₂₀ is -(CH₂)_n- where n is 2, 3, 4 or 5;R₂₁ is-CH₂-CH=CH-CH₂-,-CH₂-C≡C-CH₂-,-CH₂-CH=CH-CH₂-CH₂-,-CH₂-CH₂-CH=CH-CH₂-,-CH₂-C≡C-CH₂-CH₂-, or

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 $-\text{CH}_2-\text{CH}_2-\text{C}\equiv\text{C}-\text{CH}_2-$,the $-\text{CH}=\text{CH}-$ bond being cis or trans;

R_{22} is R_{20} or R_{21} in which one or more carbon atoms of R_{20} or R_{21} are substituted by at least one $\text{C}_1\text{-C}_6$ linear alkyl group, phenyl group or



D3

where Z_1 is lower alkyl, $-\text{OH}$, lower alkoxy, $-\text{CF}_3$, $-\text{NO}_2$, $-\text{NH}_2$ or halogen; and R and m are as defined

hereinafter;

 m is 1, 2, or 3; andwhen m is 1, 2, or 3, R is hydrogen, lower alkyl, lower alkoxy, hydroxyl, carboxyl,

chlorine, fluorine, bromine, iodine, amino, lower mono or dialkylamino,

nitro, lower alkyl thio, trifluoromethoxy, cyano, acylamino, trifluoromethyl,

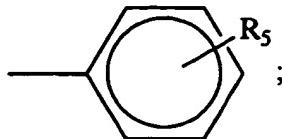
trifluoroacetyl, aminocarbonyl, monoalkylaminocarbonyl,

dialkylaminocarbonyl, formyl, $-\text{C}(=\text{O})-\text{alkyl}$, $-\text{C}(=\text{O})-\text{O-alkyl}$, $-\text{C}(=\text{O})-\text{aryl}$, $-\text{C}(=\text{O})-\text{heteroaryl}$, $-\text{CH}(\text{OR}^7)-\text{alkyl}$, $-\text{C}(=\text{W})-\text{alkyl}$, $-\text{C}(=\text{W})-\text{aryl}$, and $-\text{C}(=\text{W})-\text{heteroaryl}$;

alkyl is lower alkyl;

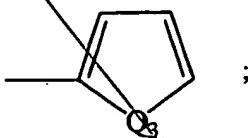
aryl is phenyl or

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where R_5 is hydrogen, lower alkyl, lower alkoxy, hydroxy, chlorine, fluorine, bromine, iodine, lower monoalkylamino, lower dialkylamino, nitro, cyano, trifluoromethyl, trifluoromethoxy;

03
heteroaryl is



Q_3 is $-O-$, $-S-$, $-NH-$, $-CH=N-$;

W is CH_2 or CHR_8 or $N-R_9$;

R_7 is hydrogen, lower alkyl, or acyl;

R_8 is lower alkyl;

R_9 is hydroxy, lower alkoxy, or $-NHR_{10}$; and

R_{10} is hydrogen, lower alkyl, C_1-C_3 acyl, aryl,

$-C(=O)-$ aryl or $-C(=O)-$ heteroaryl,

where aryl and heteroaryl are as defined above;

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and]

with the proviso that when m is 3, R is not -C(=O)-heteroaryl [or

D3
-C(=W)-heteroaryl];

[all geometric, optical and stereoisomers thereof,] or a pharmaceutically acceptable acid addition salt thereof.

Amendment March 11, 2003

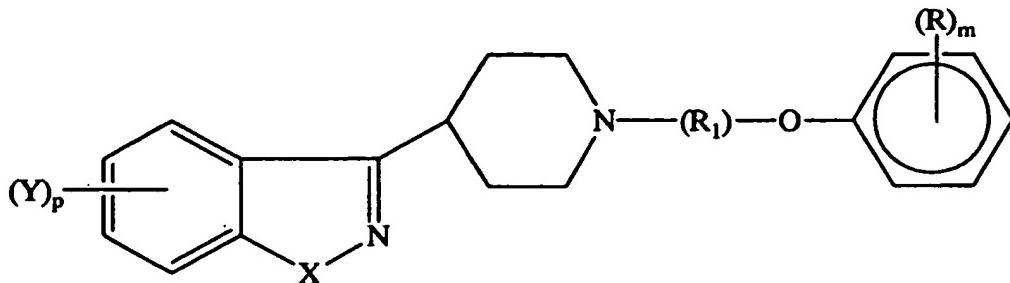
SYNNESTVEDT & LECHNER LLP

wrong serial on pages
Application No. 09/708,475 after page 1
Art Unit 1624

February 28, 2003

87. (Amended) A compound of the formula

C³



wherein

X is -O- or -S-:

p is 1 or 2;

Y is hydrogen, lower alkyl, hydroxy, chlorine, fluorine, bromine, iodine, lower alkoxy, trifluoromethyl, nitro, or amino, when p is 1;

Y is lower alkoxy, hydroxy and halogen when p is 2 and X is -O-;

(R₁) is

-CH₂-CH=CH-CH₂-.

-CH₂-C≡C-CH₂-.

-CH₂-CH=CH-CH₂-CH₂-.

-CH₂-CH₂-CH=CH-CH₂-.

-CH₂-C≡C-CH₂-CH₂- or

-CH₂-CH₂-C≡C-CH₂-.

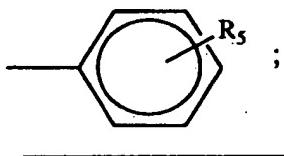
the -CH=CH- bond being cis or trans;

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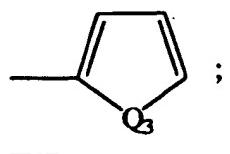
February 28, 2003

R is hydrogen, lower alkyl, lower alkoxy, hydroxyl, carboxyl, chlorine, fluorine,

C 3
bromine, iodine, amino, lower mono or dialkylamino, nitro, lower alkyl thio,
trifluoromethoxy, cyano, acylamino, trifluoromethyl, trifluoroacetyl,
aminocarbonyl, dialkylaminocarbonyl, formyl, -C(=O)-alkyl,
-C(=O)-O-alkyl, -C(=O)-aryl, -C(=O)-heteroaryl, -CH(OR₁)-alkyl,
-C(=W)-alkyl, -C(=W)-aryl, or -C(=W)-heteroaryl;

wherein alkyl is lower alkyl:aryl is phenyl or

wherein R₅ is hydrogen, lower alkyl, lower alkoxy, hydroxy,
chlorine, fluorine, bromine, iodine, lower
monoalkylamino, lower dialkylamino, nitro, cyano,
trifluoromethyl, or trifluoromethoxy;

heteroaryl iswherein Q₃ is -O-, -S-, -NH-, or -CH=N-;

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W is CH₂ or CHR₈ or N-R₉:

C 3

R₈ is hydrogen, lower alkyl, or acyl;

R₈ is lower alkyl;

R₉ is hydroxy, lower alkoxy, or -NHR₁₀; and

R₁₀ is hydrogen, lower alkyl, C₁-C₃ acyl, aryl,

-C(=O)-aryl, or -C(=O)-heteroaryl,

wherein aryl and heteroaryl are as defined above;

and

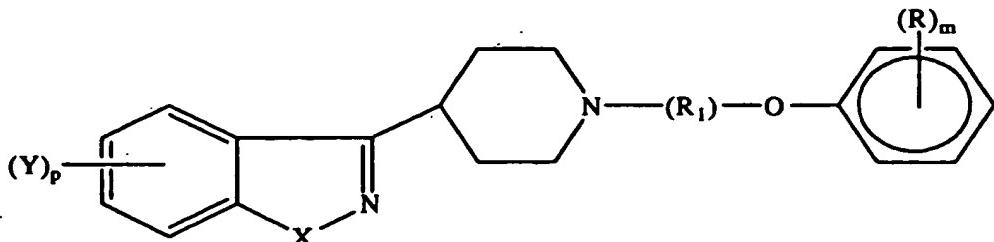
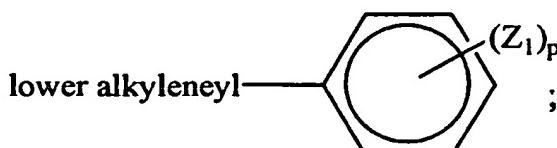
m is 1, 2, or 3;

all geometric, optical and stereoisomers thereof, or a pharmaceutically acceptable

acid addition salt thereof.

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104. (Amended) A compound of the formulaC⁴whereinX is -O- or -S-;p is 1 or 2;Y is hydrogen, lower alkyl, hydroxy, chlorine, fluorine, bromine, iodine, lower alkoxy, trifluoromethyl, nitro, or amino, when p is 1;Y is lower alkoxy, hydroxy or halogen when p is 2 and X is -O-;(R₁) is R₂₀ or R₂₁, in which one or more carbon atoms of R₂₀ or R₂₁, are substituted by at least one C₁-C₆ linear alkyl group, phenyl group orwherein Z₁ is lower alkyl, -OH, lower alkoxy, -CF₃, -NO₂, -NH₂, or halogen;

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R₂₀ is -(CH₂)_n-, wherein n is 2, 3, 4 or 5;

R₂₁ is

C⁴

-CH₂-CH=CH-CH₂-,

-CH₂-C≡C-CH₂-,

-CH₂-CH=CH-CH₂-CH₂-,

-CH₂-CH₂-CH=CH-CH₂-,

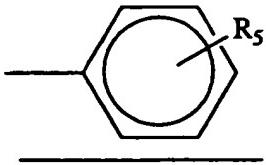
-CH₂-C≡C-CH₂-CH₂-, or

-CH₂-CH₂-C≡C-CH₂-,

the -CH=CH- bond being cis or trans;

R is hydrogen, lower alkyl, lower alkoxy, hydroxyl, carboxyl, chlorine, fluorine,
bromine, iodine, amino, lower mono or dialkylamino, nitro, lower
alkyl thio, trifluoromethoxy, cyano, acylamino, trifluoromethyl,
trifluoroacetyl, aminocarbonyl, monoalkylaminocarbonyl,
dialkylaminocarbonyl, formyl, -C(=O)-alkyl, -C(=O)-O-alkyl,
-C(=O)-aryl, -C(=O)-heteroaryl, -CH(OR₁)-alkyl,
-C(=W)-alkyl, -C(=W)-aryl, or -C(=W)-heteroaryl;
wherein alkyl is lower alkyl;
aryl is phenyl or

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C⁴

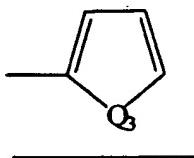
wherein R₅ is hydrogen, lower alkyl, lower alkoxy, hydroxy,

chlorine, fluorine, bromine, iodine, lower

monoalkylamino, lower dialkylamino, nitro, cyano,

trifluoromethyl, or trifluoromethoxy;

heteroaryl is



wherein Q₃ is -O-, -S-, -NH-, or -CH=N-;

W is CH₂, or CHR₈ or N-R₉;

R₇ is hydrogen, lower alkyl, or acyl;

R₈ is lower alkyl;

R₉ is hydroxy, lower alkoxy, or -NHR₁₀; and

R₁₀ is hydrogen, lower alkyl, C₁-C₃, acyl, aryl,

-C(=O)-aryl, or -C(=O)-heteroaryl.

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wherein aryl and heteroaryl are as defined above;

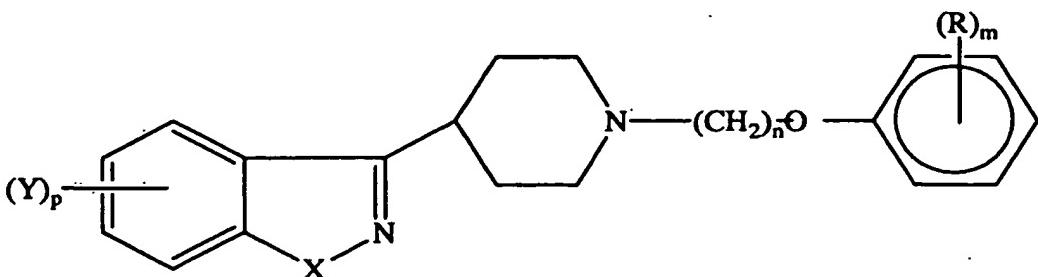
and

m is 1, 2, or 3;

all geometric, optical and stereoisomers thereof, or a pharmaceutically acceptable
acid addition salt thereof.

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Art Unit 1624

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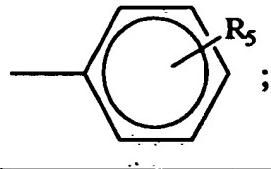
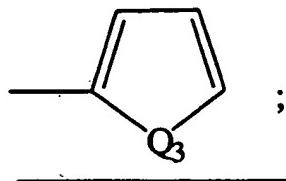
132. (Amended) A compound of the formulawhereinX is -O- or -S-p is 1 or 2;Y is hydrogen, lower alkyl, hydroxy, chlorine, fluorine, bromine, iodine,lower alkoxy, trifluoromethyl, nitro, or amino, when p is 1;Y is lower alkoxy, hydroxy or halogen when p is 2 and X is -O-;n is 2, 3, 4 or 5;R is hydrogen, lower alkyl, lower alkoxy, hydroxyl, carboxyl, chlorine, fluorine,bromine, iodine, amino, lower mono or dialkylamino, nitro, lower alkyl thio,trifluoromethoxy, cyano, acylamino, trifluoromethyl, trifluoroacetyl,aminocarbonyl, dialkylaminocarbonyl, formyl, -C(=O)-alkyl,-C(=O)-O-alkyl, -C(=O)-aryl, -C(=O)-heteroaryl, -CH(OR)-alkyl,-C(=W)-alkyl, -C(=W)-aryl, or -C(=W)-heteroaryl;wherein alkyl is lower alkyl;

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aryl is phenyl or

C5

wherein R_5 is hydrogen, lower alkyl, lower alkoxy, hydroxy,chlorine, fluorine, bromine, iodine, lowermonoalkylamino, nitro, cyano, trifluoromethyl, ortrifluoromethoxy:heteroaryl iswherein Q_3 is -O-, -S-, -NH-, or -CH=N-;W is CH₂ or CHR₈ or N-R₉:R₇ is hydrogen, lower alkyl, or acyl;R₈ is lower alkyl;R₉ is hydroxy, lower alkoxy, or -NHR₁₀; andR₁₀ is hydrogen, lower alkyl, C₁-C₃ acyl, aryl,-C(=O)-aryl or -C(=O)-heteroaryl;

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wherein aryl and heteroaryl are as defined above;

and

m is 1, 2, or 3;

with the proviso that at least one R is selected from the group consisting of

dialkylaminocarbonyl, formyl, -C(=W)-alkyl, -C(=W)-aryl, and

-C(=W)-heteroaryl;

all geometric, optical and stereoisomers thereof, or a pharmaceutically acceptable

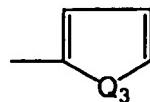
acid addition salt thereof.

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Cont

iodine, lower monoalkylamino, [lower dialkylamino,] nitro, cyano,
trifluoromethyl, trifluoromethoxy;

heteroaryl is



Q_3 is -O-, -S-, -NH-, or -CH=N-;

[W is CH₂ or CHR₈ or N-R₉;]

R₇ is hydrogen, lower alkyl, or acyl;

[R₈ is lower alkyl;

R₉ is hydroxy, lower alkoxy, or -NHR₁₀; and

R₁₀ is hydrogen, lower alkyl, C₁-C₃ acyl, aryl,

-C(=O)-aryl or -C(=O)-heteroaryl,

where aryl and heteroaryl are as defined above;] and

m is 1, 2, or 3;

[all geometric, optical and stereoisomers thereof,] or a pharmaceutically acceptable acid

addition salt thereof.

26. (Amended) A compound as claimed in claim 1, [which is 1-[4-[3-[4-(6-fluoro-

B2
1,2-benzisoxazol-3-yl]-1-piperidinyl]-propoxy]-3-methylmercaptophenyl]ethanone or] which is

1-[4-[3-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-propoxy]-3-

methylmercaptophenyl]ethanone or a pharmaceutically acceptable acid addition salt thereof.

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52. (Amended) A compound as claimed in claim [1] 132, which is N,N-dimethyl-4-[3-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]propoxy]-3-methoxybenzamide, or a pharmaceutically acceptable acid addition salt thereof.

53. (Amended) A compound as claimed in claim [1] 132, which is 1-[4-[3-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-propoxy]-3-methoxyphenyl]ethanone oxime, or a pharmaceutically acceptable acid addition salt thereof.

54. (Amended) A compound as claimed in claim [1] 132, which is 1-[4-[3-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-propoxy]methoxyphenyl]ethanone oxime O-methyl ether, or a pharmaceutically acceptable acid addition salt thereof.

55. (Amended) A compound as claimed in claim [1] 132, which is 1-[4-[3-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-propoxy]-3-methoxyphenyl]ethanone hydrazone, or a pharmaceutically acceptable acid addition salt thereof.

56. (Amended) A compound as claimed in claim [1] 132, which is 6-fluoro-3-[1-[3-[2-methoxy-4-(1-methylethenyl)phenoxy]-propyl]-4-piperidinyl]-1,2-benzisoxazole, or a pharmaceutically acceptable acid addition salt thereof.

57. (Amended) A compound as claimed in claim [1] 87, which is (Z)-1-[4-[[4-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-2-but enyl]oxy]-3-methoxyphenyl]ethanone, or a pharmaceutically acceptable acid addition salt thereof.

B3

58. (Amended) A compound as claimed in claim [1] 87, which is (E)-1-[3-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-2-butenyl]oxy]-4-hydroxyphenyl]ethanone, or a pharmaceutically acceptable acid addition salt thereof.

59. (Twice Amended) A compound [as claimed in claim 1], which is (E)-1-[3-[4-[[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-2-butenyl]oxy]-4-benzyloxyphenyl]ethanone, or a pharmaceutically acceptable acid addition salt thereof.

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65. (Twice Amended) A compound as claimed in claim [1], which is 1-(R)-(-)-[4-[3-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-2-methyl-1-propoxy]-3-methoxyphenyl]ethanone, or] 104, which is 1-(R)-(-)-[4-[3-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-2-methyl-1-propoxy]-3-methoxyphenyl]ethanone, or a pharmaceutically acceptable acid addition salt thereof.

66. (Amended) A compound as claimed in claim [1] 104, which is 1-(S)(+)-[4-[3-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-2-methyl-1-propoxy]-3-methoxyphenyl]ethanone, or a pharmaceutically acceptable acid addition salt thereof.

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74. (Amended) The compound of claim 1, wherein p is 2, X is -O-, and Y is [selected from the group consisting of] lower alkoxy[, hydroxy and halogen groups].

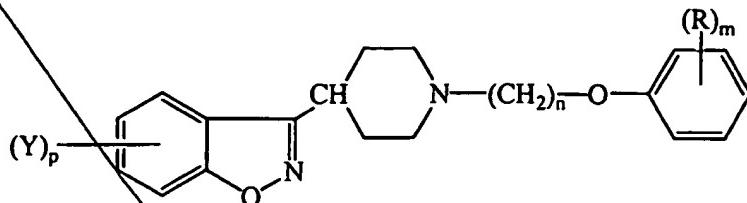
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77. (Amended) The compound of claim 1, wherein R is selected from the group consisting of hydrogen, C₁-C₃ alkyl, C₁-C₃ alkoxy, hydroxyl, -COCF₃, C₁-C₆ alkanoyl, Cl, F, Br,

I, C₁-C₃ alkylamino, [-NO₂] - NO₂, -CF₃, -OCF₃, and -C(=O)-lower alkyl.

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78.

(Amended) A compound of the formula:



Sub
02
wherein p is 1 or 2;

Y is hydrogen, Cl, Br, or F, when p is 1;

Y is lower alkoxy[, hydroxy, or halogen] when p is 2;

n is 2, 3, or 4;

R is hydrogen, C₁-C₃ alkyl, C₁-C₃ alkoxy, hydroxyl, alkanoyl, Cl, F, Br, I, amino,

C₁-C₃ mono or dialkyl amino, acylamino, -NO₂, -OCF₃, -CF₃, alkyl-C(=O)-,

CF₃-C(=O)-, or -CH(OR₇)-alkyl;

alkyl is lower alkyl;

R₇ is hydrogen, lower alkyl, lower alkyl-C(=O)-, or CF₃-C(=O)-;

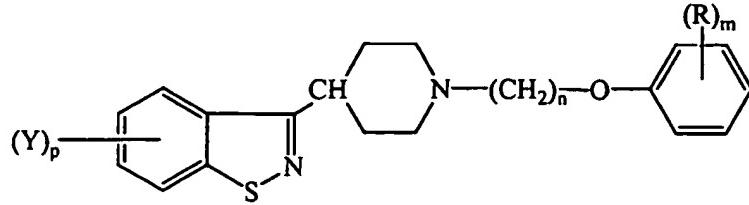
and m is 1, 2, or 3;

all geometric, optical and stereoisomers thereof or a pharmaceutically acceptable acid

addition salt thereof.

79. (Twice Amended) A compound of the formula:

B⁶



wherein p is 1 or 2;

Y is hydrogen, Cl, Br, or F, when p is 1;

Y is lower alkoxy[, hydroxy, or halogen] when p is 2;

n is 2, 3, or 4;

R is hydrogen, C₁-C₃ alkyl, C₁-C₃ alkoxy, hydroxyl, acyl, alkanoyl, Cl, F, Br, I, amino, C₁-

C₃ mono or dialkyl amino, acylamino, -NO₂, -OCF₃, -CF₃, alkyl-C(=O)-,

CF₃-C(=O)-, or -CH(OR₇)-alkyl;

alkyl is lower alkyl;

R₇ is hydrogen, lower alkyl, [or] lower alkyl-C(=O)-, or CF₃-C(=O)-;

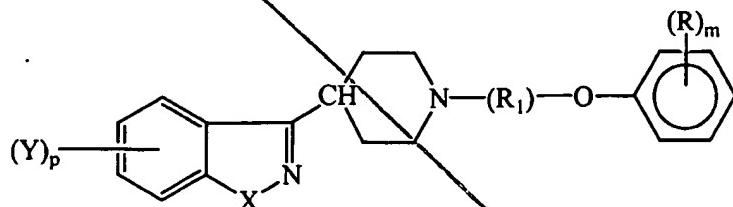
and m is 1, 2, or 3;

all geometric, optical and stereoisomers thereof or a pharmaceutically acceptable acid

addition salt thereof.

80. (Twice Amended) A compound as claimed in claim 1 [of the formula:

Part
C²



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C2
cont

R₁₀ is hydrogen, lower alkyl, C₁-C₃ acyl, aryl,
-C(=O)-aryl or -C(=O)-heteroaryl,
where aryl and heteroaryl are as defined above; and]
with the proviso that when m is 3, R is not -C(=O)-heteroaryl[, or -C(=W)-heteroaryl;],
[all geometric, optical and stereoisomers thereof,] or a pharmaceutically acceptable acid
addition salt thereof.

81. (Amended) A compound as claimed in claim [1] 87, which is (E)-1-[4-[[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-2-but enyl]oxy]-3-methoxyphenyl]ethanone, or a pharmaceutically acceptable acid addition salt thereof.

82. (Amended) A pharmaceutical composition, which comprises a compound as claimed in any one of claims [1-81] 1-75 and 77-81, and a pharmaceutically acceptable carrier therefor.

83. (Amended) An antipsychotic composition which comprises a compound as claimed in any one of claims [1-81] 1-75 and 77-81, in an amount sufficient to produce an antipsychotic effect, and a pharmaceutically acceptable carrier therefor.

84. (Amended) A method of treating psychoses, which comprises administering to a mammal a psychoses-treating effective amount of a compound as claimed in any one of claims [1-81] 1-75 and 77-81.

B6

85. (Amended) An analgesic composition which comprises a compound as claimed in any one of claims [1-81] 1-75 and 77-81, in an amount sufficient to produce a pain-relieving effect, and a pharmaceutically acceptable carrier therefor.

86. (Amended) A method of alleviating pain, which comprises administering to a mammal a pain-relieving effective amount of a compound as claimed in any one of claims [1-81] 1-75 and 77-81.

Please amend claims 98, 114, 132, and 142, all added in the Preliminary Amendment dated November 15, 2000, as follows:

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98. The compound of claim 87, wherein R is selected from the group consisting of hydrogen, C₁-C₃ alkyl, C₁-C₃ alkoxy, hydroxyl, -COCF₃, C₁-C₆ alkanoyl, Cl, F, Br, I, C₁-C₃ alkylamino, -NO₂, -CF₃, -OCF₃, and -C-lower alkyl.

B8

114. The compound of claim 104, wherein R is selected from the group consisting of hydrogen, C₁-C₃ alkyl, C₁-C₃ alkoxy, hydroxyl, -COCF₃, C₁-C₆ alkanoyl, Cl, F, Br, I, C₁-C₃ alkylamino, -NO₂, -CF₃, -OCF₃, and -C-lower alkyl.

Preliminary Amd. Nov. 15, 2000

A⁵
C³
cont

-C(=O)-aryl, or -C(=O)-heteroaryl,

where aryl and heteroaryl are as defined above; and

m is 1, 2, or 3;

all geometric, optical and stereoisomers thereof, or a pharmaceutically acceptable acid

addition salt thereof.

88. The compound of claim 87, wherein the pharmaceutically acceptable addition salt is selected from the group consisting of salts of mineral acids, salts of monobasic carboxylic acids, salts of dibasic carboxylic acids, and salts of tribasic carboxylic acids.

89. The compound of claim 88, wherein said pharmaceutically acceptable addition salts are selected from the group consisting of salts of hydrochloric acid, sulfuric acid, nitric acid, acetic acid, propionic acid, maleic acid, fumaric acid, carboxysuccinic acid, and citric acid.

90. The compound of claim 87, wherein Y is in the 5 position.

91. The compound of claim 87, wherein Y is in the 6 position.

92. The compound of claim 87, wherein Y is selected from the group consisting of hydrogen, chlorine, bromine and fluorine.

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93. The compound of claim 92, wherein Y is fluorine.

94. The compound of claim 93, wherein Y is in the 6 position.

95. The compound of claim 87, wherein p is 2, X is -O-, and Y is selected from the group consisting of lower alkoxy, hydroxy and halogen groups.

96. The compound of claim 95, wherein Y is a methoxy group.

part B7
97. The compound of claim 87, wherein R₁ is -CH₂-CH=CH-CH₂-.

98. The compound of claim 87, wherein R is selected from the group consisting of hydrogen, C₁-C₃ alkyl, C₁-C₃ alkoxy, hydroxyl, -COCF₃, C₁-C₆ alkanoyl, Cl, F, Br, I, C₁-C₃ alkylamino, -NO₂, -CF₃, -OCF₃, and -C-lower alkyl.

99. A pharmaceutical composition, which comprises a compound as claimed in claim 87, and a pharmaceutically acceptable carrier therefor.

100. An antipsychotic composition which comprises a compound as claimed in claim 87, in an amount sufficient to produce an antipsychotic effect, and a pharmaceutically acceptable carrier therefor.

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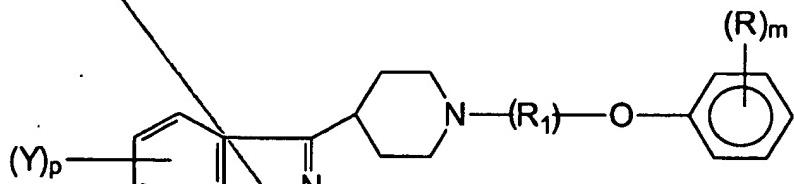
101. A method of treating psychoses, which comprises administering to a mammal a psychoses-treating effective amount of a compound as claimed in claim 87.

102. An analgesic composition which comprises a compound as claimed in claim 87, in an amount sufficient to produce a pain-relieving effect, and a pharmaceutically acceptable carrier therefor.

103. A method of alleviating pain, which comprises administering to a mammal a pain-relieving effective amount of a compound as claimed in claim 87.

C⁴

104. A compound of the formula



wherein

X is -O- or -S-

p is 1 or 2;

Y is hydrogen, lower alkyl, hydroxy, chlorine, fluorine, bromine, iodine, lower alkoxy,

trifluoromethyl, nitro, or amino, when p is 1;

*A⁵
C⁴
cont*

where aryl and heteroaryl are as defined above; and

m is 1, 2, or 3;

all geometric, optical and stereoisomers thereof, or a pharmaceutically acceptable acid
addition salt thereof.

105. The compound of claim 104, wherein the pharmaceutically acceptable addition
salt is selected from the group consisting of salts of mineral acids, salts of monobasic carboxylic
acids, salts of dibasic carboxylic acids, and salts of tribasic carboxylic acids.

106. The compound of claim 105, wherein said pharmaceutically acceptable addition
salts are selected from the group consisting of salts of hydrochloric acid, sulfuric acid, nitric acid,
acetic acid, propionic acid, maleic acid, fumaric acid, carboxysuccinic acid, and citric acid.

107. The compound of claim 104, wherein Y is in the 5 position.

108. The compound of claim 104, wherein Y is in the 6 position.

109. The compound of claim 104, wherein Y is selected from the group consisting of
hydrogen, chlorine, bromine and fluorine.

110. The compound of claim 109, wherein Y is fluorine.

R 5
111. The compound of claim 110, wherein Y is in the 6 position.

R 8
112. The compound of claim 104, wherein p is 2, X is -O-, and Y is selected from the group consisting of lower alkoxy, hydroxy and halogen groups.

113. The compound of claim 112, wherein Y is a methoxy group.

R 8
114. The compound of claim 104, wherein R is selected from the group consisting of hydrogen, C₁-C₃ alkyl, C₁-C₃ alkoxy, hydroxyl, -COCF₃, C₁-C₆ alkanoyl, Cl, F, Br, I, C₁-C₃ alkylamino, -NO₂, -CF₃, -OCF₃, and -C-lower alkyl.

115. A pharmaceutical composition, which comprises a compound as claimed in claim 104, and a pharmaceutically acceptable carrier therefor.

116. An antipsychotic composition which comprises a compound as claimed in claim 104, in an amount sufficient to produce an antipsychotic effect, and a pharmaceutically acceptable carrier therefor.

117. A method of treating psychoses, which comprises administering to a mammal a psychoses-treating effective amount of a compound as claimed in claim 104.

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118. An analgesic composition which comprises a compound as claimed in claim 104, in an amount sufficient to produce a pain-relieving effect, and a pharmaceutically acceptable carrier therefor.

119. A method of alleviating pain, which comprises administering to a mammal a pain-relieving effective amount of a compound as claimed in claim 104.

120. A compound as claimed in claim 87, with the proviso that when m is 3, R is not -C(=O)-aryl, or -C(=O)-heteroaryl, all geometric, optical and stereoisomers thereof, or a pharmaceutically acceptable acid addition salt thereof.

121. A pharmaceutical composition, which comprises a compound as claimed in claim 120, and a pharmaceutically acceptable carrier therefor.

122. An antipsychotic composition which comprises a compound as claimed in claim 120, in an amount sufficient to produce an antipsychotic effect, and a pharmaceutically acceptable carrier therefor.

123. A method of treating psychoses, which comprises administering to a mammal a psychoses-treating effective amount of a compound as claimed in claim 120.

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124. An analgesic composition which comprises a compound as claimed in claim 120, in an amount sufficient to produce a pain-relieving effect, and a pharmaceutically acceptable carrier therefor.

125. A method of alleviating pain, which comprises administering to a mammal a pain-relieving effective amount of a compound as claimed in claim 120.

126. A compound as claimed in claim 104, with the proviso that when m is 3, R is not -C(=O)-aryl, or -C(=O)-heteroaryl, all geometric, optical and stereoisomers thereof, or a pharmaceutically acceptable acid addition salt thereof.

127. A pharmaceutical composition, which comprises a compound as claimed in claim 126, and a pharmaceutically acceptable carrier therefor.

128. An antipsychotic composition which comprises a compound as claimed in claim 126, in an amount sufficient to produce an antipsychotic effect, and a pharmaceutically acceptable carrier therefor.

129. A method of treating psychoses, which comprises administering to a mammal a psychoses-treating effective amount of a compound as claimed in claim 126.

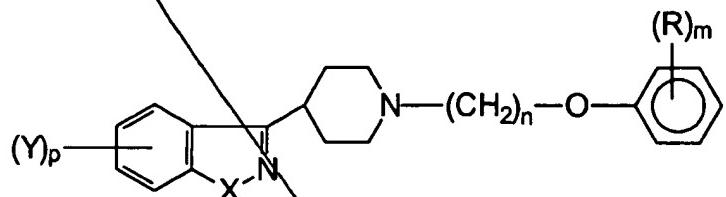
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130. An analgesic composition which comprises a compound as claimed in claim 126, in an amount sufficient to produce a pain-relieving effect, and a pharmaceutically acceptable carrier therefor.

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131. A method of alleviating pain, which comprises administering to a mammal a pain-relieving effective amount of a compound as claimed in claim 126.

132. A compound of the formula



wherein

X is -O- or -S-;

p is 1 or 2;

Y is hydrogen, lower alkyl, hydroxy, chlorine, fluorine, bromine, iodine, lower alkoxy, trifluoromethyl, nitro, or amino, when p is 1;

C 5

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Cont*

Q_3 is -O-, -S-, -NH-, or -CH=N-;

W is CH₂ or CHR₃ or N-R₉;

R₇ is hydrogen, lower alkyl, or acyl;

R₈ is lower alkyl;

R₉ is hydroxy, lower alkoxy, or -NHR₁₀; and

R₁₀ is hydrogen, lower alkyl, C₁-C₃ acyl, aryl,

-C(=O)-aryl or -C(=O)-heteroaryl,

where aryl and heteroaryl are as defined above; and

m is 1, 2, or 3;

with the proviso that at least one R is selected from the group consisting of

dialkylaminocarbonyl, formyl, -C(=W)-alkyl, -C(=W)-aryl, and

-C(=W)-heteroaryl;

all geometric, optical and stereoisomers thereof, or a pharmaceutically acceptable acid

addition salt thereof.

133. The compound of claim 132, wherein the pharmaceutically acceptable addition salt is selected from the group consisting of salts of mineral acids, salts of monobasic carboxylic acids, salts of dibasic carboxylic acids, and salts of tribasic carboxylic acids.

134. The compound of claim 133, wherein said pharmaceutically acceptable addition

salts are selected from the group consisting of salts of hydrochloric acid, sulfuric acid, nitric acid, acetic acid, propionic acid, maleic acid, fumaric acid, carboxysuccinic acid, and citric acid.

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135. The compound of claim 132, wherein Y is in the 5 position.

136. The compound of claim 132, wherein Y is in the 6 position.

137. The compound of claim 132, wherein Y is selected from the group consisting of hydrogen, chlorine, bromine and fluorine.

138. The compound of claim 137, wherein Y is fluorine.

139. The compound of claim 138, wherein Y is in the 6 position.

140. The compound of claim 132, wherein p is 2, X is -O-, and Y is selected from the group consisting of lower alkoxy, hydroxy and halogen groups.

141. The compound of claim 140, wherein Y is a methoxy group.

142. The compound of claim 132, wherein one R group is selected from the group consisting of hydrogen, C₁-C₃ alkyl, C₁-C₃ alkoxy, hydroxyl, COCF₃, C₁-C₆ alkanoyl, Cl, F, Br,

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cont

I, C₁-C₃ alkylamino, -NO₂, -CF₃, -OCF₃, and -C-lower alkyl.

O

143. A pharmaceutical composition, which comprises a compound as claimed in claim

132, and a pharmaceutically acceptable carrier therefor.

144. An antipsychotic composition which comprises a compound as claimed in claim
132, in an amount sufficient to produce an antipsychotic effect, and a pharmaceutically
acceptable carrier therefor.

145. A method of treating psychoses, which comprises administering to a mammal a
psychoses-treating effective amount of a compound as claimed in claim 132.

146. An analgesic composition which comprises a compound as claimed in claim 132,
in an amount sufficient to produce a pain-relieving effect, and a pharmaceutically acceptable
carrier therefor.

147. A method of alleviating pain, which comprises administering to a mammal a
pain-relieving effective amount of a compound as claimed in claim 132.